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PETITION FEE
Under 37 CFR 1.17(f), (g) & (h)
TRANSMITTAL
(Fees are subject to annual revision)

Send completed form to: Commissioner for Patents
P.O. Box 1450, Alexandria, VA 22313-1450

Application Number	**10/781,677**
Filing Date	**February 20, 2004**
First Named Inventor	**Kenichi KITAMURA et al.**
Art Unit	**2161**
Examiner Name	**S. Metjahic**
Attorney Docket Number	**500.43519X00**

Enclosed is a petition filed under 37 CFR 1.102(d) that requires a processing fee (37 CFR 1.17(f), (g), or (h)). Payment of $ 130.00 is enclosed.

This form should be included with the above-mentioned petition and faxed or mailed to the Office using the appropriate Mail Stop (e.g., Mail Stop Petition), if applicable. For transmittal of processing fees under 37 CFR 1.17(i), see form PTO/SB/17i.

Payment of Fees (small entity amounts are NOT available for the petition (fees)

☒ The Commissioner is hereby authorized to charge the following fees to Deposit Account No. 50-1417:
☐ petition fee under 37 CFR 1.17(f), (g) or (h) ☒ any deficiency of fees and credit of any overpayments
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Petition Fees under 37 CFR 1.17(f): **Fee $400** **Fee Code 1462**
For petitions filed under:
§ 1.53(e) - to accord a filing date.
§ 1.57(a) - to according a filing date.
§ 1.182 – for decision on a question not specifically provided for.
§ 1.183 – to suspend the rules.
§ 1.378(e) for reconsideration of decision on petition refusing to accept delayed payment of maintenance fee in an expired patent.
§ 1.741(b) – to accord a filing date to an application under §1.740 for extension of a patent term.

Petition Fees under 37 CFR 1.17(g): **Fee $200** **Fee code 1463**
For petitions filed under:
§1.12 - for access to an assignment record.
§1.14 - for access to an application.
§1.47 - for filing by other than all the inventors or a person not the inventor.
§1.59 - for expungement of information.
§1.103(a) - to suspend action in an application.
§1.136(b) - for review of a request for extension of time when the provisions of section 1.136(a) are not available.
§1.295 - for review of refusal to publish a statutory invention registration.
§1.296 - to withdraw a request for publication of a statutory invention registration filed on or after the date the notice of intent to publish issued.
§1.377 – for review of decision refusing to accept and record payment of a maintenance fee filed prior to expiration of a patent.
§1.550(c) – for patent owner requests for extension of time in ex parte reexamination proceedings.
§1.956 – for patent owner requests for extension of time in inter partes reexamination proceedings.
§ 5.12 – for expedited handling of a foreign filing license.
§ 5.15 – for changing the scope of a license.
§ 5.25 – for retroactive license.

Petition Fees under 37 CFR 1.17(h): **Fee $130** **Fee Code 1464**
For petitions filed under:
§1.19(g) – to request documents in a form other than that provided in this part.
§1.84 – for accepting color drawings or photographs.
§1.91 – for entry of a model or exhibit.
§1.102(d) – to make an application special.
§1.138(c) – to expressly abandon an application to avoid publication.
§1.313 – to withdraw an application from issue.
§1.314 – to defer issuance of a patent.

Name (Print/Type)	**Frederick D. Bailey**	*Registration No. (Attorney/Agent)*	**42,282**
Signature		*Date*	July 29, 2005

500.43519X00

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Kenichi KITAMURA et al.

Serial No.: 10/781,677

Filed: February 20, 2004

For: METHOD AND DATA PROCESSING SYSTEM WITH DATA REPLICATION

PETITION TO MAKE SPECIAL
UNDER 37 CFR §1.102(MPEP §708.02)

MS Petition
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

July 29, 2005

Sir:

Applicants hereby petition the Commissioner to make the above-identified application special in accordance with 37 CFR §1.102(d). Pursuant to MPEP §708.02(VIII), Applicants state the following.

(A) This Petition is accompanied by the fee set forth in 37 CFR §1.17(h).

The Commissioner is hereby authorized to charge any additional payment due, or to credit any overpayment, to Deposit Account No. 50-1417.

(B) All claims are directed to a single invention.

If the Office determines that all claims are not directed to a single invention, Applicant will make an election without traverse as a prerequisite to the grant of special status in conformity with established telephone restriction practice.

(C) A pre-examination search has been conducted.

The search was directed towards a storage system. In particular, the search was directed towards the invention set forth in claims 1-19. The invention is directed to a data processing method comprising the steps of: generating a second database as a duplicate of a first database allowing access from a program and after completion of the generation, switching a program access allowance from the first database to the second database, after switching the program access allowance, storing a history of a processing of the program to the second database as a processing history and reorganizing the first database, after completion of the reorganization of the first database, subjecting the first database to the processing based on the processing history stored, and upon completion of the processing of the first database according to the processing history stored, switching the program access allowance from the second database to the first database.

The search of the above features was conducted in the following areas:

Class	Subclass
707	2-4, 8-10, 100-102, 200-205
711	161, 162
714	5-8

Additionally, a computer database search was conducted on the USPTO system EAST.

(D) The following is a list of the references deemed most closely related to the subject matter encompassed by the claims:

U.S. Patent Number	Inventors
5,287,496	Chen et al.
5,317,731	Dias et al.
5,596,706	Shimazaki et al.
6,023,707	Hamada et al.
6,654,752	Ofek
6,829,623	Tsuchida et al.

A copy of each of these references (as well as other references uncovered during the search) is enclosed in an accompanying IDS.

(E) It is submitted that the present invention is patentable over the references for the following reasons.

It is submitted that the cited references, whether taken individually or in combination with each other, fail to teach or suggest the invention as claimed. In particular, the cited references, at a minimum, fail to teach or suggest as recited in the claims:

a first feature of the present invention as recited in independent claim 1 wherein after switching the program access allowance, storing a history of a processing of the program to the second database as a processing history and reorganizing the first database, after completion of the reorganization of the first

database, subjecting the first database to the processing based on the processing history stored, and upon completion of the processing of the first database according to the processing history stored, switching the program access allowance from the second database to the first database;

a second feature of the present invention as recited in independent claim 2 including means for storing a history of a processing of the program to the second database as a processing history and reorganizing the first database after switching the program access allowance, means for subjecting the first database to the processing based on the processing history stored, after completion of the reorganization of the first database, and means for switching the program access allowance from the second database to the first database upon completion of the processing of the first database according to the processing history stored;

a third feature of the present invention as recited in independent claim 3 including executing a predetermined processing for the first database, executing a second processing to the first database, the second processing being based on a history of processing of the program to the second database, and switching the program access allowance from the second database to the first database;

a fourth feature of the present invention as recited in independent claim 11 including means for executing a predetermined processing for the first database, means for executing a second processing to the first database, the second processing being based on a history of processing of the program to the second

database, and means for switching the program access allowance from the second database to the first database; and

a fifth feature of the present invention as recited in independent claim 19 including executing a predetermined processing for the first database, executing a second processing to the first database, the second processing being based on a stored history of processing of the program to the second database, and switching the program access allowance from the second database to the first database.

Further, the cited references fail to teach or suggest the above noted features of the present invention when taken in combination with other limitations recited in the claims.

The references considered most closely related to the claimed invention are briefly discussed below:

U.S. Patent No. 5,287,496 (Chen et al.) discloses a dynamic, finite versioning scheme that supports concurrent transaction and query processing in which there is no interference between transactions and queries and no quiescence of either transactions or queries for allowing queries to access a more up-to-date database. Only a finite number of logical versions are dynamically maintained on disk for a database page. Acquiring no locks, queries access appropriate query versions, according to their initiation times. Each corresponding query version of all the database pages constitutes a transaction-consistent, but perhaps slightly out-of-date, database snapshot. Through typical concurrent control mechanisms, different transactions access the most up-to-

date versions, and their updates are allowed to be incrementally written into the database before they are committed. To save storage, a physical page copy may simultaneously represent multiple versions. The exact logical version(s) that a physical page copy represents changes dynamically and implicitly. A new mechanism using time-invariant and time-varying data structures is introduced to define query snapshots, to facilitate a new query snapshot to be taken without interrupting either the transaction or query processing, to identify dynamically appropriate versions for transaction and query accesses, and to allow efficient, on-the-fly garbage collection when it is recognized that only a single page copy is sufficient to represent the required logical versions. (See, e.g., Abstract and column 2, line 34, through column 3, line 27.) However, unlike the present invention, Chen et al. does not disclose after completion of the reorganization of the first database, subjecting the first database to the processing based on the processing history stored. More particularly, Chen et al. at a minimum does not teach or suggest the above described first feature of the present invention as recited in independent claim 1, the above described second feature of the present invention as recited in independent claim 2, the above described third feature of the present invention as recited in independent claim 3, the above described fourth feature of the present invention as recited in independent claim 11 and the above described fifth feature of the present invention as recited in independent claim 19, and further does not teach or suggest these features in combination with the other limitations recited in each of the independent claims.

U.S. Patent No. 5,317,731 (Dias et al.) discloses a method and system for simultaneous database transaction processing and query processing where an intelligent page store containing shared disk storage is provided. The intelligent page store provides two access paths to the shared data, one by a transaction entity and one by a query entity. In the intelligent page store an implicit versioning mechanism allows simultaneous access by the transaction entity and the query entity to the shared disk storage, where the transaction entity is presented the current data and where the query entity is presented a recent and consistent version of the data. Furthermore, a single copy of all but recently updated pages is maintained by the intelligent page store, and the query and transaction entities operate independently of each other. (See, e.g., Abstract and column 2, line 51, through column 3, line 51.) However, unlike the present invention, Dias et al. does not disclose after switching the program access allowance, storing a history of a processing of the program to the second database as a processing history and reorganizing the first database. More particularly, Dias et al. at a minimum does not teach or suggest the above described first feature of the present invention as recited in independent claim 1, the above described second feature of the present invention as recited in independent claim 2, the above described third feature of the present invention as recited in independent claim 3, the above described fourth feature of the present invention as recited in independent claim 11 and the above described fifth feature of the present invention as recited in independent claim 19, and

further does not teach or suggest these features in combination with the other limitations recited in each of the independent claims.

U.S. Patent No. 5,596,706 (Shimazaki et al.) discloses a highly reliable online system which is provided with a backup computer center (sub-online system) in addition to an original computer center (main online system) in order to improve the reliability of the online system. With respect to the database, the main online system is provided with an original database (main database) while the sub-online system is provided with a backup database (sub-database) which is a duplicate of the main database. The main online system and the sub-online system are connected through a transmission path. Information on an update performed in the main database is transferred to the sub-online system through the transmission path to thereby update the sub-database in a manner similar to the main database. Terminal units are normally connected to the main online system, where the main database is updated by transactions inputted from the terminals. When a failure occurs in the main online system, the terminals are changed over to be connected to the sub-online system to allow transaction processing to be continued. Further, there are provided a control system for synchronizing contents between the main database and the sub-database when the original computer center is changed over to the backup computer center, a recovery system for recovering the main database or the sub-database from failures and an integration system for integrating both the main database and the sub-database when they are independently updated due to a failure in the transmission path or the like. (See, e.g., Abstract and column 1, line 65, through

column 2, line 64.) However, unlike the present invention, Shimazaki et al. does not disclose upon completion of the processing of the first database according to the processing history stored, switching the program access allowance from the second database to the first database. More particularly, Shimazaki et al. at a minimum does not teach or suggest the above described first feature of the present invention as recited in independent claim 1, the above described second feature of the present invention as recited in independent claim 2, the above described third feature of the present invention as recited in independent claim 3, the above described fourth feature of the present invention as recited in independent claim 11 and the above described fifth feature of the present invention as recited in independent claim 19, and further does not teach or suggest these features in combination with the other limitations recited in each of the independent claims.

U.S. Patent No. 6,023,707 (Hamada et al.) discloses a method and system for creating a logical duplicate database (including a partial duplication) for an online database during online service hours in an online database system operating, for example, on a 24-hour basis. According to one aspect of the invention, there is provided a system for duplicating an update database in a computer, comprising: copying system for creating a copy database, including a partial copy, of the update database; journal selecting system for selecting data, related to parts of the copy database in which the copy has finished, from an update data journal of the update database that is made when the copy database is being copied by the copying system; and duplicating system for updating the

contents of the copy database created by the copying system with the contents of the update data journal selected by the journal selecting system. In this configuration, a data range for the copying in the copying system is specified externally by logical data structure information, thus realizing easy creation of a partial duplicate DB at an arbitrary instant in time. (See, e.g., Abstract and column 3, line 22, through column 4, line 38.) However, unlike the present invention, Hamada et al. does not disclose after completion of the reorganization of the first database, subjecting the first database to the processing based on the processing history stored. More particularly, Hamada et al. at a minimum does not teach or suggest the above described first feature of the present invention as recited in independent claim 1, the above described second feature of the present invention as recited in independent claim 2, the above described third feature of the present invention as recited in independent claim 3, the above described fourth feature of the present invention as recited in independent claim 11 and the above described fifth feature of the present invention as recited in independent claim 19, and further does not teach or suggest these features in combination with the other limitations recited in each of the independent claims.

U.S. Patent No. 6,654,752 (Ofek) discloses a data processing system that includes redundant storage of data and that enables access to the data by multiple processes. The data processing system stores a data base on redundant storage devices and enables the system to run applications, such as on-line transaction processing applications, concurrently with other applications, such as decision support system applications, providing the capability of altering

data stored in a disk storage device. In one aspect of the invention, a data set is stored in a primary data storage facility that is addressable by a first application. A second data storage facility is configured to correspond to the first data storage facility. A first command establishes the second data storage facility as a mirror for the first data storage facility thereby to replicate the data set in the second data storage facility. A second command terminates the memory mirror function of the second data storage facility and enables the second storage facility to be addressed by a second application concurrently with operations of the first application that utilize the data set in the primary data storage facility. (See, e.g., Abstract and column 6, lines 14 - 42.) However, unlike the present invention, Ofek does not disclose upon completion of the processing of the first database according to the processing history stored, switching the program access allowance from the second database to the first database. More particularly, Ofek at a minimum does not teach or suggest the above described first feature of the present invention as recited in independent claim 1, the above described second feature of the present invention as recited in independent claim 2, the above described third feature of the present invention as recited in independent claim 3, the above described fourth feature of the present invention as recited in independent claim 11 and the above described fifth feature of the present invention as recited in independent claim 19, and further does not teach or suggest these features in combination with the other limitations recited in each of the independent claims.

U.S. Patent No. 6,829,623 (Tsuchida et al.) discloses a method and system for managing multiple database storage units, and more particularly related to managing multiple database storage units to duplicate the database without interrupting the on-going operations involving the access to the database storage units. The invention includes a method of managing a plurality of databases in response to continuous transactions, the databases including at least a first database and a second database, including: maintaining a duplicate pair of first data and second data in a first format in the first database in response to database transactions; maintaining third data in a second format in the second database, the second format being organized to summarize the first data and the second data; determining a point in time for a predetermined database management task; discontinuing the database transactions to and from the first data in the first database; continuing the database transactions to and from the second data in the first database; rolling back the first data in the first database to the point in time; resolving the first data in the first database and the third data in the second database; rolling forward the first data in the first database to match the second data in the first database; and resuming the database transactions to and from the first data and the second data in the first database. (See, e.g., Abstract and column 2, lines 17 - 67.) However, unlike the present invention, Tsuchida et al. does not disclose after completion of the reorganization of the first database, subjecting the first database to the processing based on the processing history stored. More particularly, Tsuchida et al. at a minimum does not teach or suggest the above described first feature of the present invention as

recited in independent claim 1, the above described second feature of the present invention as recited in independent claim 2, the above described third feature of the present invention as recited in independent claim 3, the above described fourth feature of the present invention as recited in independent claim 11 and the above described fifth feature of the present invention as recited in independent claim 19, and further does not teach or suggest these features in combination with the other limitations recited in each of the independent claims.

Therefore, since the cited references at a minimum fail to teach or suggest the above described first feature of the present invention as recited in independent claim 1, the above described second feature of the present invention as recited in independent claim 2, the above described third feature of the present invention as recited in independent claim 3, the above described fourth feature of the present invention as recited in independent claim 11 and the above described fifth feature of the present invention as recited in independent claim 19, and further fail to teach or suggest these features of the present invention in combination with the other limitations recited in each of the independent claims, it is submitted that all of the claims are patentable over the cited references whether said references are taken individually or in combination with each other.

F. Conclusion

Applicant has conducted what it believes to be a reasonable search, but makes no representation that "better" or more relevant prior art does not exist.

The United States Patent and Trademark Office is urged to conduct its own complete search of the prior art, and to thoroughly examine this application in view of the prior art cited herein and any other prior art that the United States Patent and Trademark Office may locate in its own independent search. Further, while Applicant has identified in good faith certain portions of each of the references listed herein in order to provide the requisite detailed discussion of how the claimed subject matter is patentable over the references, the United States Patent and Trademark Office should not limit its review to the identified portions but rather, is urged to review and consider the entirety of each reference, and not to rely solely on the identified portions when examining this application.

In view of the foregoing, Applicant requests that this Petition to Make Special be granted and that the application undergo the accelerated examination procedure set forth in MPEP 708.02 VIII.

G. Fee (37 C.F.R. 1.17(h))

The fee required by 37 C.F.R. § 1.17(h) is to be paid by:

[X] the Credit Card Payment Form (attached) for $130.00.

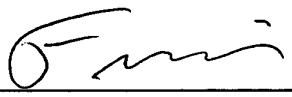
[ ] charging Account _____ the sum of $130.00.

A duplicate of this petition is attached.

Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any overpayment of fees, to the deposit account of MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C., Deposit Account No. 50-1417 (Atty. Docket No. 500.43519X00).

Respectfully submitted,

MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C.



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